“Loan-Portfolio Quality and the Diffusion of Technological Innovation”

by

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Message of the Paper

ISSUE: tendency in Basel II to induce institutions to reveal their risk management systems/methodology to establish industry “best practice”

QUESTION: does this dissemination of innovations undermine banks’ incentives to innovate ex ante?

ANSWER: yes it does!

→ sharing screening technology leads to fiercer competition, reducing NPV of investment in such technology

Approach

- Focus on a single technology leader’s incentives
- Incentives are about initial investment in screening technology for bank lending
- Lending in two periods with potential sharing in the second
- Technology leader faces one competitor
  → Bertrand competition in each period, mixed strategy equilibrium in the lending market

Results

- Key result: banking sector's expected loan portfolio quality is maximized by choosing less than perfect diffusion
- Paper goes on to argue that there might be commitment problems
  → ex post full dissemination optimal
- Reward innovators?
  → more lenient supervision
  → allow it to enter new markets??
  → have bank block diffusion

Paper could easily be more ambitious

Important question: what is special about banking?

Answer:

- Quality of the industry at large should be a concern to all players

  → total demand of banking services may depend on confidence in the system

  → as paper stands now, any one player only benefits from failures of competitors

- Industry-wide investment and dissemination of technology is the issue

  → suggests IO/general equilibrium approach

Why broader IO approach?

- Real world industry structure will have some players specialize in risk management services
- They may leverage their own (proprietary) knowledge

  → in doing so preempt competitors from building up their own capabilities
- Sharing the basic standards may not at all reduce the value of further innovations

  → we are not talking about stand-alone innovations!!

Conclusion

- Extremely interesting and important problem
- Paper could expand on the problem by putting it more in the banking context
- IO approach would allow for real policy implications